2/23/04-00209

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Commander
LANTNAVFACENGCOM
Attention: Mr. Stephen Garth, Code EV22-DSG
6506 Hampton Boulevard
Norfolk, VA 23508-1278

Subject: Responses to Comments - Final Remedial Investigation/Human Health **Risk** Assessment/ Ecological Risk Assessment for Site **2**
St. Juliens Creek Annex, Chesapeake, Virginia
N62470-95-D-6007, CTO 0028

Dear Mr. Garth:

CH2M HILL has prepared the following responses to VDEQ comments submitted September 25,2003 on the **Draft** Remedial Investigation/Human Health **Risk** Assessment/Ecological **Risk** Assessment for Site 2, St. Juliens Creek Annex, Chesapeake, Virginia by **Ms.** Jennifer Jones of VDEQ. Responses to comments are addressed herein.

1. **Comment:** Section 7.5.2.5. It was unclear why deep groundwater **risks** for future residents were not added to other **risks** (surface water, sediment, soil, etc.) for a total **risk** number. Please provide more background or clarification data.

   **Response:** The text was revised to include combined **risks** for future adult, child, and lifetime residents.

2. **Comment:** Section 7.5.2.8. Please include the actual **risk** numbers in each section of text in addition to characterizing the **risk as** above or below acceptable levels. It is more convenient to **look** up a **risk** number for a certain receptor in the text rather than looking through all of the RAGS tables.

   **Response:** The text has been amended to **reflect** the **risk** numbers and whether or not the risk is at an acceptable level.

3. **Comment:** Section 7.5.2.11. Please cite the EPA guidance source that promotes using mean lead concentrations for screening. VDEQ does not follow this procedure. Mean concentrations should be used in modeling, but maximum concentrations are

always used in initial COPC screening. Using maximum concentrations would result in lead being retained as a COPC in surface soil, surface water, industrial and residential total soil, sediment and shallow groundwater.

**Response:** EPA has accepted the use of mean lead concentrations for screening. However, the text was amended to indicate that exposure to lead in isolated hot spot soil areas would potentially pose unacceptable risks to receptors. The elevated lead concentrations found in soil will be considered by the Tier I SJCA Partnering team when evaluating remedial alternatives to address the potential risks identified during the Remedial Investigation. An Expanded RI; including additional investigation of shallow groundwater, surface water, and sediment; was conducted in the winter of 2003/2004 at Site 2. As a result, the potential risks to human and ecological receptors exposed to these media will be reevaluated and considered when identifying potential remedial alternatives.

4. **Comment:** Tables 2.2, 2.4 and 2.9. When air is the exposure medium, COPCs should be screened against ambient *air* RBCs, SSLs for inhalation, and/or J&E modeled indoor air concentrations. Soil and/or tap water RBCs should not be used to screen for COPCs in *air*.

**Response:** The tables an associated text were amended to screen COPCs against ambient *air* RBCs, SSLs for inhalation, and/or J&E modeled indoor *air* concentrations.

5. **Comment:** Tables 2.7. Note that mercury was detected a level above the SSL for inhalation in total soil. The maximum silver concentration detected in this table is 2.5 mg/kg; however in surface soil tables the maximum detected was 3.5 mg/kg. The correct concentration for total soil and surface soil is 3.5 mg/kg because it is the higher of the duplicate pair. Also, as a general note, please include in the title or in the scenario box in the top left corner whether the table is screening for residential or industrial COPCs for easier review.

**Response:** Mercury was retained as a COPC for *air* as a result of the revisions indicated in Comment 4. The silver concentration was also corrected. The type of RBC screening (residential or industrial) is indicated in the footnote of each table.

6. **Comment:** Table 2.12. 1,2-dichlorobenzene is listed twice in this table with different concentrations and detection frequencies. Please explain.

**Response:** 1,2-Dichlorobenzene was listed twice because it was detected as a VOC and SVOC. Only the VOC result has been included, since it was detected at a higher concentration.

If you have any questions concerning these comments, please do not hesitate to contact me at (757) 460-3734, extension 19.

Sincerely,
CH2M HILL

William J. Friedmann, Jr.

William J. Friedmann, Jr., P.G.
Activity Manager

cc: Ms. Jennifer Jones/VDEQ
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